

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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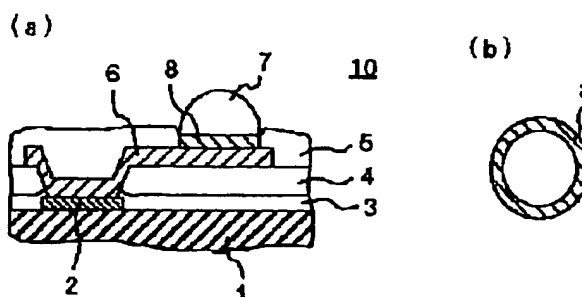
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APPLICANT : HITACHI LTD;

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TITLE : SEMICONDUCTOR DEVICE AND  
MANUFACTURING METHOD



**ABSTRACT :** **PROBLEM TO BE SOLVED:** To provide a semiconductor device at a low cost and its manufacturing method for reducing stress caused by the difference in coefficient of thermal expansion with a mounting substrate surely.

**SOLUTION:** A semiconductor device includes an electrode part 2 on a semiconductor element 1, a wiring layer 6 connected to the electrode part 2 via an insulating layer 4, and a package electrode 7 formed on the wiring layer 6. A conductive member 8 made of alloy with martensitic transformation is placed partly in a conductive path from the wiring layer 6 to the package electrode 7 to absorb stress caused in the conductive path. In this way, a semiconductor device with reliability in connection, superior electrical characteristics and suitability in high-density mounting can be obtained at a low cost. As a result, the semiconductor device can be connected with a wiring board, using solder to complete high-performance electronic apparatus.

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